On the Occurrence of the Fissurellid Genus *ZIDORA* in Australian Waters.

By Professor Ralph Tate.

[Read May 1, 1894.]

The genus *Zeidora* was instituted by A. Adams in 1860, for the reception of two Japanese shells having the outer aspect of *Emarginula* and an internal shelf as in *Crepidula*. Reeve in his monograph, 1873, figures the two species described previously by Adams. Two species referrable to this genus occur in Pliocene strata in Italy, upon one of which Sequenza, 1880, proposed his genus *Crepiemarginula*, which Boog Watson, "Challenger Report," 1886, relegates to a synonym. Mr. Beddome, Proc. Roy. Soc. Tasm. for 1882, p. 169 (1883), founded his genus *Legrandia* on an undoubted example of *Zidora*. Boog Watson, *op. cit.*, added another species to the genus, from the West Indies, making four in all known in living creation. It is not at all improbable that the shell I am about to describe is conspecific with Beddome's *Legrandia Tasmanica*. Fischer, "Manuel de Conch.," 1885, emended the spelling of the generic name to *Zidora*.

The genus is of extreme interest from a morphological point of view, which is enhanced by the beauty of ornament and rarity of occurrence of the shells. The animal of *Zidora* is unknown, and despite the analogy that the shell presents to *Emarginula* and *Puncturella*, Mr. Boog Watson is disposed to view the shell as an internal one, and that "its true place will probably be found among the Opisthobranchiata, perhaps in the neighbourhood of *Pleurobranchus*."

The shells of the living species have hitherto been obtained only from moderately deep water.

Zidora Legrandi, *spec. nov.* (1894).

Shell depressedly conical, cap-shaped, white, delicate, elliptic-oblong in basal outline, rounded behind, truncately rounded and deeply cleft in front, with a narrow sunken fissural band extending to the apex; back depressedly convex; apex minute and short, hooked and somewhat adpressed, almost reaching the posterior margin.

The ornament consists of concentric threadlets and obliquely radial threadlets, which produce an elegant cancellation of rhombic spaces; in the apical region the ornament is extremely fine, but beyond it the cancellation is visible to the unaided eye

(there are about nine rows of rhombic spaces in a radial distance of 2 millimetres measured from the periphery). The margin of the aperture is closely crenulate-serrate. The fissural band is margined on each side by an elevated rounded keel, which is crenately sculptured; the scars on the fissural band are arched, sharp and close, but not contiguous.

The inside is glossy and smooth; the septum is narrowly crescentic (extending in the middle line to about one-fifth and on the sides to about one-fourth of the length of the aperture), much depressed posteriorly (about one-half the depth of the shell) becoming shallower on the anterior border, which almost reaches the base of the shell.

Dimensions.—Antero-posterior diam., 9·5; lateral diam., 6·; height, in about the middle line, 2· (vix); depth of cleft, 2 millimetres.

Localities.—Corney Point, Spencer Gulf, one example from shell-sand *(Dr. Perks);* dredged in 7 to 20 fathoms in Backstairs Passage, five dead examples *(Dr. Verco).*

Remarks.—Mr. Beddome's definition of the genus and species of *Legrandia Tasmanica* reads as follows:—

"Legrandia, shell emarginulaform, but with an internal plate like Crypta.

Legrandia Tasmanica, shell oval, radiately ribbed; front edge fissured; interior with a shelly plate extending one-fourth the length of the shell. Long., 5 mill.; lat., 3 mill.; alt., ·75 mill. Habt., Kelso Bay, Tamar River, 17 fms."

The specific description barely permits of a comparison with the South Australian specimens, though there is a substantial agreement in the size of the internal plate, and the exterior dimensions are proportionately the same, the measures of the Tasmanian shell being about one-half of the largest of the South-Australian specimens.

Without comparison of actual specimens it is impossible to establish identity, though there is presumptive evidence that the two shells belong to one species. In this latter consideration I have thought it best, as is the practice in botanical nomenclature, when a generic name is suppressed to employ it as a specific name for the type-species, and so preserve the intention of the original author, in this case to compliment the veteran conchologist of Tasmania, Mr. Legrand.

Of the three living species diagnostically known and figured, *Z. Legrandi* seems to resemble *Z. calceolina* more than the others; but in one particular it differs from all, namely, by its apex situated within the vertical plane of the posterior margin, and not as in them projecting beyond the periphery.